



H-28-07

IFW #

Practitioner Docket No.: 789_124

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Koji IKEDA, Kazuyoshi SHIBATA and Tomoki ITO

Ser. No.: 10/784,732

Filed: February 23, 2004

Confirmation No.: Unknown

For: PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 27, 2004 under "EXPRESS MAIL" mailing label number EV 47281 9762 US.

Janet M. Stevens

REQUEST TO CORRECT INVENTORSHIP PURSUANT TO
PTO RULE 48(a)

Sir:

This application was filed February 23, 2004, listing the following inventors:

Koji IKEDA,

Kazuyoshi SHIBATA, and

Tomoki ITO.

One of the inventors was omitted by mistake. The inventorship needs to be changed to include a fourth inventor, as follows:

Fumitake TAKAHASHI.

Applicants respectfully request that the inventorship be corrected to include Mr. Takahashi.

In accordance with Rule 48(a), the following documents are attached hereto:

1. Statement of Fumitake Takahashi Pursuant to Rule 48(a)(2);
2. a new Declaration and Power of Attorney Form (executed by all four inventors) pursuant to Rule 48(a)(3);

04/29/2004 HLE333 00000017 10784732

04/29/2004 HLE333 00000046 10784732

01 FC:1051 130.00 OP

01 FC:1460

130.00 OP

Void date: 04/29/2004 HLE333

04/29/2004 HLE333 00000017 10784732

01 FC:1051 130.00 OP

3. our check in the amount of \$130.00 pursuant to Rule 48(a)(4); and
4. Consent of Assignee Pursuant to Rule 48(a)(5); and
5. a Supplemental Application Data Sheet.

The PTO is respectfully requested to correct the inventorship as outlined above and provide applicants' undersigned representative with written notice acknowledging that the inventorship has been so corrected.

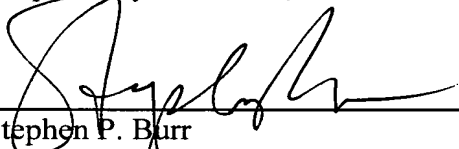
Should the appropriate official at the U.S. PTO have any questions concerning this matter, he or she is requested to telephone applicants' undersigned representative.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

April 27, 2004

Date



Stephen P. Burr
Reg. No. 32,970

SPB/jms

Enclosures:

Statement of Fumitake Takahashi
Declaration and Power of Attorney
Check

Consent of Assignee Pursuant to Rule 48(a)(5)

Copy of Recordation Form Cover Sheet and Assignment filed February 23, 2004

Copy of Recordation Form Cover Sheet and Assignment from Fumitake Takahashi
to NGK Insulators, Ltd. filed April 27, 2004

Supplemental Application Data Sheet

BURR & BROWN
P.O. Box 7068
Syracuse, NY 13261-7068

Customer No.: 025191
Telephone: (315) 233-8300
Facsimile: (315) 233/8320



DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

特許出願宣言書及び委任状

Japanese Language Declaration

日本語宣言書

私は、以下に記名された発明者として、ここに下記の通り宣言する：	As a below named inventor, I hereby declare that		
私の住所、郵便の宛先そして国籍は、私の氏名の後に記載された通りである。	My residence, post office address and citizenship are as stated next to my name.		
下記の名称の発明について、特許請求範囲に記載され、且つ特許が求められている発明主題に関して、私は、最初、最先且つ唯一の発明者である（唯一の氏名が記載されている場合）か、或いは最初、最先且つ共同発明者である（複数の氏名が記載されている場合）と信じている。	I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled		
PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD			
上記発明の明細書はここに添付されているが、下記の欄がチェックされている場合は、この限りでない：	the specification of which is attached hereto unless the following box is checked:		
<input type="checkbox"/> _____の日に出席され、 この出席の米国出願番号またはPCT国際出願番号は、 _____であり、且つ _____の日に補正された出席（該当する場合）	<input checked="" type="checkbox"/> was filed on <u>February 23, 2004</u> as United States Application Number <u>10/784,732</u> or PCT International Application Number and was amended on <u>February 23, 2004</u> (if applicable).		
私は、上記の補正書によって補正された、特許請求範囲を含む上記明細書を検討し、且つ内容を理解していることをここに表明する。	I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.		
私は、連邦規則法典第37編規則1.56に定義されている、特許性について重要な情報を開示する義務があることを認める。	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.		
私は、ここに、以下に記載した外国での特許出願または発明者証の出願、或いは米国以外の少なくとも一国を指定している米国法典第35編第365条(a)によるPCT国際出願について、同第119条(a)-(d)項又は第365条(b)項に基づいて優先権を主張するとともに、優先権を主張する本出願の出願日より前の出願日を有する外国での特許出願または発明者証の出願、或いはPCT国際出願については、いかなる出願も、下記の枠内をチェックすることにより示した。	I hereby claim foreign priority under Title 35, United States Code, Section 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(c) of any PCT International application which designated at least one country other than the United States listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate or PCT International application having a filing date before that of the application for which priority is claimed.		
Prior Foreign Application(s) 外国での先行出願	Priority Not Claimed 優先権主張なし		
<u>2001-275598</u> (Number) (番号)	<u>Japan</u> (Country) (国名)	<u>11 September 2001</u> Day/Month/Year Filed (出願日/月/年)	<input type="checkbox"/>
<u> </u> (Number) (番号)	<u> </u> (Country) (国名)	<u> </u> Day/Month/Year Filed (出願日/月/年)	<input type="checkbox"/>

Japanese Language Declaration
(日本語宣言書)

<p>私は、ここに、下記のいかなる米国仮特許出願についても、その米国法典第 3 5 編 1 1 9 条 (e) 項の利益を主張する。</p>		<p>I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below.</p>	
<p>(Application No.) (出願番号)</p>		<p>(Filing Date) (出願日)</p>	
<p>(Application No.) (出願番号)</p>		<p>(Filing Date) (出願日)</p>	
<p>私は、ここに、下記のいかなる米国出願についても、その米国法典第 3 5 編第 1 2 0 条に基づく利益を主張し、又米国を指定するいかなる P C T 国際出願についても、その同第 3 6 5 条 (c) に基づく利益を主張する。また、本出願の各特許請求の範囲の主題が、米国法典第 3 5 編第 1 1 2 条第 1 段に既定された態様で、先行する米国出願又は P C T 国際出願に開示されていない場合においては、その先行出願の出願日と本国内出願日または P C T 国際出願日との間の期間中に入手された情報で、連邦規則法典第 3 7 編規則 1 . 5 6 に定義された特許性に関わる重要な情報について開示義務があることを承認する。</p>		<p>I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) or 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code Section 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of the application.</p>	
<p>PCT/JP02/09297 (Application No.) (出願番号)</p>		<p>11 September 2002 (Filing Date) (出願日)</p>	
<p>(Application No.) (出願番号)</p>		<p>(Status: Patented, Pending, Abandoned) (現況：特許許可、係属中、放棄)</p>	
<p>(Application No.) (出願番号)</p>		<p>(Status: Patented, Pending, Abandoned) (現況：特許許可、係属中、放棄)</p>	
<p>私は、ここに表明された私自身の知識に係わる陳述が真実であり、且つ情報と信ずることに基づく陳述が、真実であると信じられることを宣言し、さらに、故意に虚偽の陳述などを行った場合は、米国法典第 1 8 編第 1 0 0 1 条に基づき、罰金または拘禁、若しくはその両方により処罰され、またそのような故意による虚偽の陳述は、本出願またはそれに対して発行されるいかなる特許も、その有効性に問題が生ずることを理解した上で陳述が行われたことを、ここに宣言する。</p>		<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code an that such willful false statement may jeopardize the validity of the application or any patent thereon.</p>	
<p>委任状： 私は本出願を審査する手続を行い、且つ米国特許商標庁との全ての義務を遂行するために、記名された発明者として、下記の弁護士及び／または弁理士を任命する。(氏名及び登録番号を記載すること)</p>		<p>POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorneys(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith (list name and registration number).</p> <p>Stephen P. Burr, Reg. No. 32,970 Kevin C. Brown, Reg. No. 32,402</p>	
<p>書類送付先：</p>		<p>Send Correspondence to: Customer No. 25191</p>	
<p>直通電話連絡先：(氏名及び電話番号)</p>		<p>Direct Telephone Calls to: (name and telephone number)</p> <p>Stephen P. Burr Phone: (315) 233-8300 Facsimile: (315) 233-8320</p>	

Japanese Language Declaration
(日本語宣言書)

唯一または第一発明者氏名	Full name of sole or first inventor Koji IKEDA
発明者の署名 日付	Inventor's Signature <i>Koji Ikeda</i> Date April 7, 2004
住所	Residence Hisai-City, Mie-Prefecture Japan
国籍	Citizenship Japanese
郵便の宛先	Post Office Address c/o NGK Insulators, Ltd. 2-56, Suda-Cho, Mizuho-Ku Nagoya-City, Aichi-Prefecture 467-8530 Japan

第二共同発明者がいる場合、その氏名	Full name of second joint inventor, if any Kazuyoshi SHIBATA
第二共同発明者の署名 日付	Second Inventor's Signature <i>Kazuyoshi Shibata</i> Date April 7, 2004
住所	Residence Mizunami-City, Gifu-Prefecture Japan
国籍	Citizenship Japanese
郵便の宛先	Post Office Address c/o NGK Insulators, Ltd. 2-56, Suda-Cho, Mizuho-Ku Nagoya-City, Aichi-Prefecture 467-8530 Japan

第二共同発明者がいる場合、その氏名	Full name of third joint inventor, if any Tomoki ITO
第二共同発明者の署名 日付	Third Inventor's Signature <i>Tomoki ITO</i> Date April 7, 2004
住所	Residence Nagoya-City, Aichi-Prefecture Japan
国籍	Citizenship Japanese
郵便の宛先	Post Office Address c/o NGK Insulators, Ltd. 2-56, Suda-Cho, Mizuho-Ku Nagoya-City, Aichi-Prefecture 467-8530 Japan

(第三以下の共同発明者についても同様に記載し、署名をすること)	(Supply similar information and signature for third and subsequent joint inventors.)
---------------------------------	--------------------------------------------------------------------------------------

Japanese Language Declaration
(日本語宣言書)

唯一または第一発明者氏名	Full name of fourth joint inventor, if any Fumitake TAKAHASHI
発明者の署名	Fourth Inventor's Signature <i>Fumitake Takahashi</i>
日付	Date April 7, 2004
住所	Residence Nagoya-City, Aichi-Prefecture Japan
国籍	Citizenship Japanese
郵便の宛先	Post Office Address c/o NGK Insulators, Ltd. 2-56, Suda-Cho, Mizuho-Ku Nagoya-City, Aichi-Prefecture 467-8530 Japan

第二共同発明者がいる場合、その氏名	Full name of fifth joint inventor, if any
第二共同発明者の署名	Fifth Inventor's Signature
日付	Date
住所	Residence
国籍	Citizenship
郵便の宛先	Post Office Address

第二共同発明者がいる場合、その氏名	Full name of sixth joint inventor, if any
第二共同発明者の署名	Sixth Inventor's Signature
日付	Date
住所	Residence
国籍	Citizenship
郵便の宛先	Post Office Address

(第三以下の共同発明者についても同様に記載し、署名をすること)	(Supply similar information and signature for third and subsequent joint inventors.)
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Practitioner's Docket No.: 789_124

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Koji IKEDA, Kazuyoshi SHIBATA and Tomoki ITO

Ser. No.: 10/784,732

Filed: February 23, 2004

Confirmation No.: Unknown

For: PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**STATEMENT OF FUMITAKE TAKAHASHI
PURSUANT TO RULE 48(a)(2)**

I, Fumitake Takahashi, hereby declare and state that:

1. I contributed to the subject matter of at least one claim pending in the above-referenced application, and thus should have been listed as an inventor when this application was filed in the PTO.

2. The error in inventorship in this application occurred without deceptive intention on my part.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

April 7, 2004

Date



Fumitake TAKAHASHI



Practitioner's Docket No.: 789_124

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of: Koji IKEDA, Kazuyoshi SHIBATA and Tomoki ITO

Ser. No.: 10/784,732

Filed: February 23, 2004

Confirmation No.: Unknown

For: **PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CONSENT OF ASSIGNEE PURSUANT TO RULE 48(a)(5)

NGK Insulators, Ltd., a corporation organized under the laws of Japan, represents that it is the owner of the entire right, title and interest in the above-referenced U.S. patent application by virtue of an assignment from Messrs. Koji Ikeda, Kazuyoshi Shibata and Tomoki Ito, which was filed in the U.S. PTO on February 23, 2004 (copy attached), and by virtue of an Assignment from Mr. Fumitake Takahashi, a copy of which is attached hereto.

NGK Insulators, Ltd., hereby consents to the Request to Correct Inventorship filed contemporaneously herewith, wherein Mr. Takahashi is added as an inventor in this application.

The undersigned (whose title is supplied below) is authorized to act on behalf of NGK Insulators, Ltd.

NGK Insulators, Ltd.

April 7, 2004

Date

By:

Takafumi Hochi
Takafumi Hochi

General Manager

Legal Affairs & Intellectual Property Department



Our Docket No.: 789_124

RECORDATION FORM COVER SHEET

U.S. Department of Commerce
U.S. Patent and Trademark Office

PATENTS ONLY

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents on hand thereof.

1. Name of conveying party(ies)

- A. Koji IKEDA
- B. Kazuyoshi SHIBATA
- C. Tomoki ITO

Additional name(s) of conveying parties attached ☒ No

2. Name and address of receiving party(ies):

Name: NGK Insulators, Ltd.
Address: 2-56, Suda-Cho, Mizuho-Ku
Nagoya-City, Aichi-Prefecture 467-8530
Japan

Additional name(s) attached? ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
- ☐ Security Agreement ☐ Change of Name
- ☐ Other

- A. Execution Date December 9, 2003
- B. Execution Date December 10, 2003
- C. Execution Date December 8, 2003

4. Application number(s) or patent number(s)

If this document is being filed together with a **NEW APPLICATION**, the execution date of this application is December 10, 2003.

A. Patent Application No.(s)

B. Patent No.(s)

Additional Numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Stephen P. Burr

Address: BURR & BROWN
P.O. Box 7068
Syracuse, NY 13261-7068
Telephone: (315) 233-8300
Facsimile: (315) 233-8320

6. Total number of application and patents involved: 1

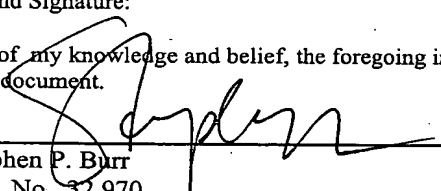
7. Total fee (37 CFR 3.41) \$40.00

- ☒ Enclosed
- ☒ Authorized to charge any deficiency or credit any over payment to Deposit Account No. 50-1446.

DO NOT USE THIS SPACE

8. Statement and Signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.


Stephen P. Burr
Reg. No. 32,970

February 23, 2004
Date

Total Number of Pages Comprising Cover Sheet 4

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director of the U.S. Patent and Trademark
P.O. Box 1450
Alexandria, VA 22313-1450

COPY

ASSIGNMENT

<p>Koji IKEDA</p> <hr/> <p>(Inventor 1)</p> <p>Kazuyoshi SHIBATA</p> <hr/> <p>(Inventor 2)</p> <p>Tomoki ITO</p> <hr/> <p>(Inventor 3)</p> <hr/> <p>(Inventor 4)</p> <hr/> <p>(Inventor 5)</p>	
<p>各々の署名人に対して支払われた総額 1 ドル (\$1.00) および他の適切な有価約因を考慮して、本署名人 (ら) は、</p>	<p>In consideration of the sum of dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to</p>
<p>NGK INSULATORS, LTD.</p> <p>Name of Assignee _____</p> <p>2-56, Suda-cho, Mizuho-ku, Nagoya-city, Aichi-pref.</p> <p>Address of Assignee _____</p> <p>467-8530, JAPAN</p> <p>_____</p>	
<p>(以降譲受人と称する) に対して、以下に示される発明、本発明に関する全ての特許出願及び全ての特許権に関する合衆国、その領土、保護領および占有地に対するすべての権利、所有権および利益を譲渡することに同意し、その結果、譲渡および移転し、</p>	<p>(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as</p>
<p>PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD</p> <hr/> <p>(Identification of Invention, such as Title, Case Number or Foreign Application Number)</p>	

COPY

前記発明は、本前記署名人が下記の日付・出願番号でアメリカ合衆国において特許出願を履行したものである。	for which the undersigned have executed an application for patent in the United States of America
on _____ (Insert Date of Signing of Application)	
U.S. Application(s) Serial Number(s) _____ filed _____ (Alternative identification)	
1) 本署名人(ら)は本出願、その継続出願およびその分割出願に関する全ての必要書類を履行することに同意し、譲受人が必要と思われる、これらの出願に関して別途譲渡証を履行することに同意する。	1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.
2) 本署名人(ら)は、本出願もしくはその継続出願、もしくはその分割出願に関して宣言されるインターフェアレンスに関して必要な全ての書類を履行することに同意し、証拠取得およびそのようなインターフェアレンスの進行にあたり起こりうるいかなる方法においても前記譲受人と協力することに同意する。	2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
3) 本署名人(ら)は、すべての用紙および書類を履行し、国際工業所有権保護協定の請求もしくは規定もしくは類似協定に関して必要ないかなる行為を施行することに同意する。	3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
4) 本署名人(ら)は、前記譲受人に対して、有効な米国特許の許可を取得するために必要なすべての積極的な行為を履行することに同意する。	4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
5) 本署名人(ら)は、本出願もしくはその分割出願もしくはその継続出願から発生したすべての米国特許を、全ての利益の譲受人として前記譲受人に対して発行することを特許庁長官に許可および請求し、署名人(ら)はここに譲渡される全ての利益を譲渡するためのすべての権利を有し、対立関係にある協定を過去に履行することもなく、もしくは将来履行しないことを誓約する。	5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

COPY

6) 本署名人(ら)は、この書類の記録上、米国特許商標庁の規定に従うために必要もしくは所望の追加確認事項をこの譲渡証に記入するための権利が、バー&ブラウン弁護士事務所(Burr & Brown)に付与されていることをここに承認する。

6) The undersigned hereby grant(s) the firm of **BURR & BROWN** the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date Dec. 9, 2003 Signature Koji Ikeda (SEAL)
Koji IKEDA

Date Dec. 10, 2003 Signature Kazuyoshi Shibata (SEAL)
Kazuyoshi SHIBATA

Date Dec. 8, 2003 Signature Tomoki Ito (SEAL)
Tomoki ITO

Date _____ Signature _____ (SEAL)

Date _____ Signature _____ (SEAL)

COPY



Our Docket No.: 789 124

Form PTO 1595

MAIL STOP ASSIGNMENT RECORDATION FORM COVER SHEET

U.S. Department of Commerce
U.S. Patent and Trademark Office

PATENTS ONLY

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents on hand thereof.

1. Name of conveying party(ies)

Fumitake TAKAHASHI

Additional name(s) of conveying parties attached ☒ No

2. Name and address of receiving party(ies):

Name: NGK Insulators, Ltd.

Address: 2-56, Suda-Cho, Mizuho-Ku
Nagoya-City, Aichi-Prefecture 467-8530
Japan

3. Nature of Conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Additional name(s) attached? ☒ No

Execution Date April 7, 2004

4. Application number(s) or patent number(s)

If this document is being filed together with a **NEW APPLICATION**, the execution date of this application is .

A. Patent Application No.(s)

10/784,732

B. Patent No.(s)

Additional Numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning this document should be mailed:

Name: Stephen P. Burr

Address: BURR & BROWN
P.O. Box 7068
Syracuse, NY 13261-7068
Telephone: (315) 233-8300
Facsimile: (315) 233-8320

6. Total number of application and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00

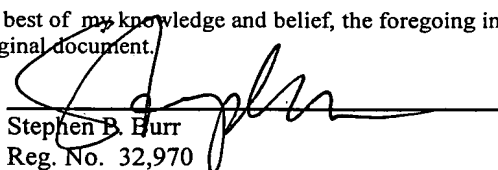
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☒ Authorized to charge any deficiency or credit any over payment to Deposit Account No. 50-1446.

8. Charge Deposit account

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9. Statement and Signature:

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Stephen P. Burr
Reg. No. 32,970

April 27, 2004

Date

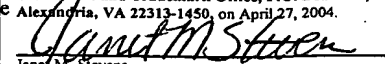
Total Number of Pages Comprising Cover Sheet 3

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Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
Director of the US Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail addressed to Mail Stop Assignment Recordation Services, Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, on April 27, 2004.


Janet M. Stevens

ASSIGNMENT

Insert Name of Inventor(s)	<u>Fumitake TAKAHASHI</u>
各々の署名人に対して支払われた総額 1 ドル (\$ 1.00) および他の適切な有価約因を考慮して、本署名人 (ら) は、	In consideration of the sum of dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to
Name of Assignee Address of Assignee	<u>NGK Insulators, Ltd.</u> <u>2-56, Suda-Cho, Mizuho-Ku</u> <u>Nagoya-City, Aichi-Prefecture 467-8530</u> <u>Japan</u>
(以降譲受人と称する) に対して、以下に示される発明、本発明に関する全ての特許出願及び全ての特許権に関する合衆国、その領土、保護領および占有地に対するすべての権利、所有権および利益を譲渡することに同意し、その結果、譲渡および移転し、	(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as
<u>PIEZOELECTRIC/ELECTROSTRICTIVE MANUFACTURING METHOD</u> (Identification of Invention, such as Title, Case Number or Foreign Application Number)	
前記発明は、本前記署名人が下記の日付・出願番号でアメリカ合衆国において特許出願を履行したものである。	for which the undersigned have executed an application for patent in the United States of America
on _____ (Insert Date of Signing of Application)	
U.S. Application(s) Serial Number(s) <u>10/784,732</u> filed <u>February 23, 2004</u> (Alternative identification)	
1) 本署名人 (ら) は本出願、その継続出願およびその分割出願に関する全ての必要書類を履行することに同意し、譲受人が必要と思われる、これらの出願に関して別途譲渡証を履行することに同意する。	1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

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<p>2) 本署名人(ら)は、本出願もしくはその継続出願、もしくはその分割出願に関して宣言されるインターフェアレンスに関して必要な全ての書類を履行することに同意し、証拠取得およびそのようなインターフェアレンスの進行にあたり起こりうるいかなる方法においても前記譲受人と協力することに同意する。</p>	<p>2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.</p>
<p>3) 本署名人(ら)は、すべての用紙および書類を履行し、国際工業所有権保護協定の請求もしくは規定もしくは類似協定に関して必要ないかなる行為を施行することに同意する。</p>	<p>3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.</p>
<p>4) 本署名人(ら)は、前記譲受人に対して、有効な米国特許の許可を取得するために必要なすべての積極的な行為を履行することに同意する。</p>	<p>4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.</p>
<p>5) 本署名人(ら)は、本出願もしくはその分割出願もしくはその継続出願から発生したすべての米国特許を、全ての利益の譲受人として前記譲受人に対して発行することを特許庁長官に許可および請求し、署名人(ら)はここに譲渡される全ての利益を譲渡するためのすべての権利を有し、対立関係にある協定を過去に履行することなく、もしくは将来履行しないことを誓約する。</p>	<p>5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.</p>
<p>6) 本署名人(ら)は、この書類の記録上、米国特許商標庁の規定に従うために必要もしくは所望の追加確認事項をこの譲渡証に記入するための権利が、バー&ブラウン弁護士事務所(Burr & Brown)に付与されていることをここに承認する。</p>	<p>6) The undersigned hereby grant(s) the firm of BURR & BROWN the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.</p>
<p>In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s):</p>	
<p>Date <u>April 7, 2004</u></p>	<p>Signature <u>Fumitake Takahashi</u> (SEAL) Fumitake TAKAHASHI</p>

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Application Data Sheet

APPLICATION INFORMATION

Application Number:: 10/784,732
Filing Date:: 02/23/2004
Application Type:: Regular
Subject Matter:: Utility
CD-Rom or CD-R?: None
Title:: PIEZOELECTRIC/ELECTROSTRICTIVE
MANUFACTURING METHOD
Attorney Docket Number:: 789_124
Request for Early Publication?: No
Request for Non-Publication?: No
Suggested Drawing Figure:: 1
Total Drawing Sheets:: 18
Small Entity:: No
Petition included?: No
Secrecy Order in Parent Appl.?: No

APPLICANT INFORMATION

Applicant Authority Type:: Inventor
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State or Province of Mailing Address:: Aichi-Prefecture
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Postal or Zip Code of Mailing Address:: 467-8530

Applicant Authority Type:: Inventor
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State or Province of Mailing Address:: Aichi-Prefecture
Country of Mailing Address:: Japan
Postal or Zip Code of Mailing Address:: 467-8530

CORRESPONDENCE INFORMATION

<u>Correspondence Customer Number::</u>	<u>025191</u>
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REPRESENTATIVE INFORMATION

<u>Representative Customer Number::</u>	<u>25191</u>
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DOMESTIC PRIORITY INFORMATION

<u>Application::</u>	<u>Continuity Type::</u>	<u>Parent Application::</u>	<u>Parent Filing Date::</u>
<u>This Application</u>	<u>is a Continuation of</u>	<u>PCT/JP02/09297</u>	<u>09/11/02</u>

FOREIGN PRIORITY INFORMATION

<u>Country::</u>	<u>Application Number::</u>	<u>Filing Date::</u>	<u>Priority Claimed::</u>
<u>Japan</u>	<u>2001-275598</u>	<u>09/11/01</u>	<u>Yes</u>

ASSIGNEE INFORMATION

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State or Province of Mailing Address:: Aichi-Prefecture
Country of Mailing Address:: Japan
Postal or Zip Code of Mailing Address:: 467-8530